

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

Date of Report: 12/19/02

Date Received: 12/05/02

Project: Metro Self Monitor, PO# M69135

Date Extracted: 12/13/02

Date Analyzed: 12/13/02

**RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE  
FOR TOTAL METALS BY  
INDUCTIVELY COUPLED PLASMA (ICP)  
(METHOD 6010)**

Results Reported as mg/L (ppm)

<u>Sample ID</u> Laboratory ID	<u>Chromium</u>	<u>Copper</u>	<u>Nickel</u>	<u>Zinc</u>
M69135 212047-01	0.68	0.45	0.45	<0.05
Method Blank	<0.05	<0.05	<0.05	<0.05

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

Date of Report: 12/19/02

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Project: Metro Self Monitor, PO# M69135

### QUALITY ASSURANCE RESULTS FROM TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 212110-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference	Acceptance Criteria
Chromium	mg/L (ppm)	<0.05	<0.05	nm	0-20
Copper	mg/L (ppm)	0.56	0.56	0	0-20
Nickel	mg/L (ppm)	<0.05	<0.05	nm	0-20
Zinc	mg/L (ppm)	1.5	1.5	0	0-20

Laboratory Code: 212110-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	% Recovery MS	Acceptance Criteria
Chromium	mg/L (ppm)	2	<0.05	106	80-120
Copper	mg/L (ppm)	2	0.56	105	80-120
Nickel	mg/L (ppm)	4	<0.05	103	80-120
Zinc	mg/L (ppm)	2	1.5	103	80-120

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	% Recovery LCS	% Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Chromium	mg/L (ppm)	2	100	98	80-120	2
Copper	mg/L (ppm)	2	101	98	80-120	3
Nickel	mg/L (ppm)	4	101	97	80-120	4
Zinc	mg/L (ppm)	2	97	95	80-120	2

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

**FRIEDMAN & BRUYA, INC.**

**ENVIRONMENTAL CHEMISTS**

James E. Bruya, Ph.D.  
Charlene Morrow, M.S.  
Yelena Aravkina, M.S.  
Bradley T. Benson, B.S.  
Kurt Johnson, B.S.

3012 16th Avenue West  
Seattle, WA 98119-2029  
TEL: (206) 285-8282  
FAX: (206) 283-5044  
e-mail: fbi@isomedia.com

December 19, 2002

**DUPLICATE COPY**

**INVOICE # 02ACU1219-2**

Accounts Payable  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134

RE: Project Metro Self Monitor, PO# M69135 - Results of testing requested by  
Gerry Thompson for material submitted on December 5, 2002.

1 sample analyzed for Total Chromium, Copper, Nickel and Zinc  
by Method 6010B @ \$80 per sample \$ 80.00

Amount Due ..... \$ 80.00

FEDERAL TAX ID #(b) (6)

212047

## SAMPLE CHAIN OF CUSTODY

ME 12-5-02 A15

Send Report To

G. Thompson

Company

Alaskan Copper Works

Address

628 S. Harvard St

City, State, ZIP

Seattle WA 98134

Phone #

206-382-8377

Fax #

206-382-4709

SAMPLER'S (signature)

PROJECT NAME/NO.

Metro Seal Monitor

PO #

M69135

REMARKS

Page # of

TURNAROUND TIME

☐ Standard (2 Weeks)☐ RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

☐ Dispose after 30 days☐ Return samples☐ Will call with instructions


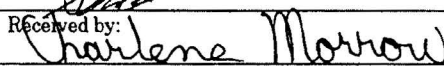
Sample ID	Lab ID	Date Sampled	Time Sampled	Sample Type	# of containers	ANALYSES REQUESTED										Notes
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS	OC Curvize				
M69135	01	12/5/02	11:00	H <sub>2</sub> O	1											

Friedman & Bruya, Inc.  
3012 16th Avenue West

Seattle, WA 98119-2029

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: 	G. Thompson	ACW	12/5/02	1:34
Received by: 	Charlene Morrow	F&BI	12-5-02	1:34
Relinquished by:				
Received by:				



FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

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December 19, 2002

Gerry Thompson, Project Manager  
Alaskan Copper Works  
628 South Hanford  
Seattle, WA 98134


Dear Mr. Thompson:

Included are the results from the testing of material submitted on December 5, 2002 from your Metro Self Monitor, PO# M69135 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl  
Project Manager

Enclosures  
ACU1219R.DOC